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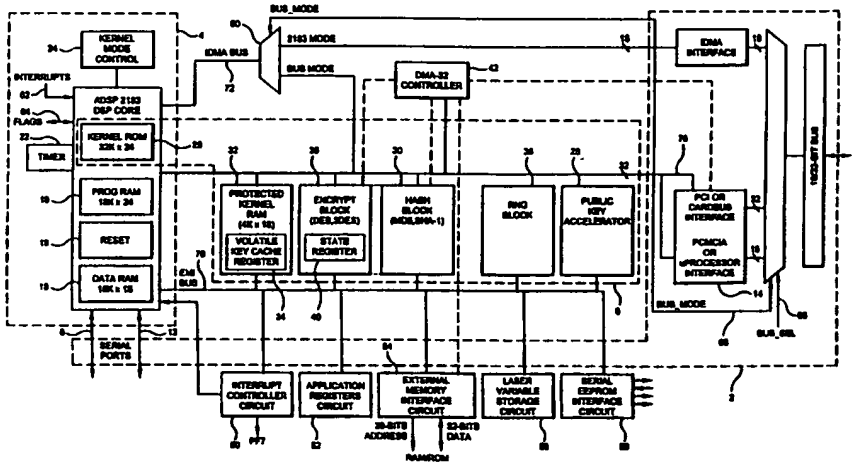

(57) Abstract

A secure communication platform on an integrated circuit is a highly integrated security processor which incorporates a general purpose digital signal processor (DSP) (62), along with a number of high performance cryptographic function elements, as well as a PCI and PCMCIA (14) interface. The secure communications platform is integrated with an off-the-shelf DSP so that a vendor who is interested in digital signal processing could also receive built-in security functions which cooperate with the DSP. The integrated circuit includes a callable library of cryptographic commands and encryption algorithms. An encryption processor is included to perform key and data encryption, as well as a high performance hash processor and a public key accelerator (28).

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
IPC(6) :H04L 9/06
US CL :380/25,49,2
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 380/25,49,2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,987,595 A (MARINO, JR. et al.) 22 January 1991, abstract, col.3, lines 15-20, col.4, lines 20-49, fig.1	1-15
Y	US 5,631,960 A (LIKENS et al.) 20 May 1997, col.5, lines 39-48, col.6, lines 16-45, col.,7 lines 11-23.	1-15
A	US 5,557,346 A (LIPNER et al) 17 September 1996, fig.1, col.9, lines 11-20, col.13, lines 46-58, col.15, lines 51-59	23-27
A	US 5,623,545 A (CHILDS et al) 22 April 1997, col.4, lines 5-23, col.5, lines 56-67, col.6, lines 1-10	1-20,28-30

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

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International application No.
PCT/US98/19316

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 5,721,777 A (BLAZE) 24 February 1998, col.2, lines 52-67, col.3, lines 1-18, 31-43, col.4, lines 41-63, col.6, lines 9-43	1-17,23-30

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International application No.
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B. FIELDS SEARCHED
Electronic data bases consulted (Name of data base and where practicable terms used):

APS,DIALOG
search terms: key recovery, key escrow, hash, smart card, token card, secure kernel, diffie hellman,public key, plural algorithm, encryption algorithm, multiple algorithm, random key, random number generator